25080. Aleurites cordata (Thunb.) Muell. Arg.

Japan wood oil.

From Tokyo, Japan. Purchased from The Japan Seed and Plant Company (Limited). Received at Seattle, Wash., February 8, 1909. Received at Washington, D. C., March 23, 1909.

"This shipment of seeds was imported for acclimatization experiments and for the extraction of oil to be used in chemical and physical analyses for comparison with S. P. I. No. 25081.

"In Japan this species is most commonly known under the names abura-giri and yama-giri, meaning, respectively, oil-kiri and wild-kiri, kiri (giri) being the name for Paulownia imperialis, which it greatly resembles in its foliage. It is a tropical or semitropical plant and grown only in the provinces to the south of Tokyo (36° lat.). It is found also in Formosa, the coastal provinces of China as far inland as Chekiang, the Isle of Hainan, and sparingly in farther India and Cochin China, being indigenous probably to Japan and Formosa only.

"The seeds are very small compared with those of the other species of Aleurites, being about the size of large castor-oil seeds, which they very much resemble. The oil expressed from them, which serves chiefly as a drying oil, is comparable to the more abundant t'ung oil of China and to perilla oil, which is largely substituted for it in Japan, as it can be more cheaply grown. In Japan, as in China, the wood oil is grown on land not suited for general farming." (W. Fischer.)

25081. Aleurites fordii Hemsl.

China wood oil.

From Hankow, China. Purchased through Hon. William Martin, consul-general. "This shipment of seeds was imported for the purpose of continuing on a large scale some experiments commenced four years ago in the acclimatization of the tree which produces the t'ung oil or China wood oil of commerce. Of the few 1-year-old seedlings distributed by mail throughout the Southern and Pacific States, those sent to the Gulf have done so unusually well, growing so rapidly and some of them blossoming and fruiting the second year from transplanting, that it was thought advisable, now that the section climatically best adapted to them has been discovered, to try larger plantations, not only to find out whether they would be a paying crop on cheap land in the South, but to determine the best treatment necessary to make them a commercial success.

"The t'ung tree or t'ung-shu, from the seeds of which China wood oil is obtained, is distributed widely throughout the provinces drained by the Yangtze, principally up the river and south of it, extending into the peninsula. Its product should not be confused with the true wood oil, or Gurjun balsam, which is an oleo-resin and which is the exudation from the trunks of several species of Dipterocarpus of Indo-China. The name "wood oil" for the Chinese product is really a misnomer and was applied by foreigners on account of the universal use of the oil as a covering for woodwork. To the Chinese the tree, seed, and oil are known, respectively, as t'ung-shu, t'ung-tze, and t'ung-yü, the word t'ung being applied also quite generally to several other trees of similar aspect of foliage, such as the catalpa, Sterculia plantanifolia, and Paulownia imperialis. The trees are more restricted to the thin, dry soils of the hilly regions, where farming is unprofitable and where also the Chinese claim that they bear larger crops. They are propagated by seeds which sprout in a short time and are placed where the trees are to stand permanently; also by hard-wood cuttings, which root readily. The tree should be tried in this country, not only for its valuable seeds, but as an ornament. It attains a height of from 20 to 40 feet, and its large, heartshaped leaves, smooth, green bark, and striking panicles of white flowers slightly tinged with red, which appear with the leaves in the spring, make it a very desirable